UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/184,572	11/02/1998	LISA MCKERRACHER	99999/MARUSY	4396

26211 7590 06/12/2003

FISH & RICHARDSON P.C.
45 ROCKEFELLER PLAZA, SUITE 2800
NEW YORK, NY 10111

EXAMINER
TURNER, SHARON L

ART UNIT	PAPER NUMBER
1647	

DATE MAILED: 06/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/184,572	MCKERRACHER ET AL.	
	Examiner	Art Unit	
	Sharon L. Turner	1647	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 March 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *25-29 and 34* is/are pending in the application.

4a) Of the above claim(s) *25-29* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *34* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) *25-29 and 34* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 25 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

Response to Amendment

1. The amendment filed 3-3-03 has been entered into the record and has been fully considered.

2. As a result of Applicants amendment, all rejections not reiterated herein have been withdrawn by the examiner.

3. Claims 32 and 33 are canceled. Claims 25-29 and 34 are pending.

4. Claims 25-29 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 10.

Priority

5. Receipt of the priority document is acknowledged. However, it is noted that the data presented in the priority document and the specification as filed 11-2-98 differ substantially. In particular the disclosure of the priority document is limited to C3 transferase mediated suppression of the inhibition of axon outgrowth in PC12 cells in vitro, whereas the specification of the application exemplifies C3 transferase mediated suppression of the inhibition of axon outgrowth in crushed optic nerve, an in vivo exemplification. Claim 34 is drawn to a method wherein the effects and delivering are required to be at a CNS or PNS lesion site in a patient. As the PC12 in vitro data is not an art accepted model for prediction of in vivo neuronal axonal out growth, see for example Crutcher et al., CRC Crit. Rev. in Neurobiol., 2(3):297-33, 1986, p. 298, lines 17-18 which teach that the relevance of the data from PC12 cells to normal neuronal

growth is not clear, the effective filing date awarded instant claims is that of the '572 application filing date, 11-02-1998.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

7. Claim 34 is rejected under 35 U.S.C. 102(e) as being anticipated by Liao et al., US Patent No. 6,180,597 issued 1-30-01, filed 8-11-98.

Liao et al., teach a method of treating an individual for example for hypoxia or brain injury comprising administration of a compound which is a rho GTPase function inhibitor in an amount effective to increase endothelial cell NOS activity in brain tissue. The specification discloses such inhibitors as compounds including C. botulinum ADP-ribosyl C3 transferase administered at for example 50 ug/ml, see in particular column 13, line 64-column 14, line 16, examples 1-26 and claims 1-93. The administration may

be in vivo or in vitro as claimed. Liao teach administration via intravenous, subcutaneous, intramuscular routes or via infusion, see in particular columns 15-17, especially, column 16, lines 48-61. The administration is for increasing blood flow and increasing ecNOS in tissues and thus necessarily involves exposure to the PNS throughout the body including at lesion sites which would necessarily result from ischemia. In particular, Liao teaches administration for a method of reducing brain injury resulting from stroke or ischemia and necessitates incresing the activity of ecNOS in brain tissue, see also claims 22, 86 and 90-91 and thus the administration necessarily results in the administration of C3 transferase to the CNS and the PNS at the site of ischemic lesions. The reference additionally teaches at column 16, that the amounts may be varied to achieve an appropriate dosage based on factors such as severity of disease and route of administration including a more localized delivery route.Thus, the reference teachings anticipate the claimed invention absent evidence to the contrary because the property of suppressing said inhibition of neuronal axon outgrowth is inherently provided.

Applicants argue as to amended claim 34 that the reference fails to teach a method of suppressing the inhibition of neuronal axon growth by delivering C3 directly at a CNS or PNS lesion site in a patient. Applicants argue that the reference does not specifically teach localized delivery to a CNS or PNS lesion or suppressing the inhibition of neuronal axon growth. Applicants thus argue that the reference cannot be anticipatory.

Applicant's arguments filed 3-3-03 have been fully considered but are not persuasive. Applicant's arguments appear to contend that because the reference does not ipsis verbis recite the claim limitations that the reference cannot be anticipatory. However, applicants are directed to MPEP 2112. Something which is old does not

become patentable upon the discovery of a new property. The claiming of a new use, new function or unknown property which is inherently present n the prior art does not necessarily make the claim patentable. In re Best, 562 F.2d 1252, 1254, 195 USPQ 430, 433 (CCPA 1977). The Liao reference teaches administration of the same compound to a patient suffering from brain injury from stroke and/or ischemia for prevention and treatment of such effects associated with the disease, i.e., including neuronal degeneration. As the treatment is effective it is deemed to be effective to provide for neuronal regeneration or outgrowth. The administration allows for delivery of the drug to the CNS and PNS which are known sites of lesion. Thus, the Examiner has set forth a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." Once the examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product. In re Marosi, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir. 1983). Absent such evidence the Examiner cannot withdraw the rejection of record. Applicants have set forth no evidence to show unobvious difference. As the administration is deemed the same, the reference is anticipatory. The claims provide no limitations as to suitable dosages or routes of administration that are different from the prior art.

8. Claims 34 is rejected under 35 U.S.C. 102(e) as being anticipated by Johnson et al., US Patent No. 5,851,786 issued 12-22-98, filed 9-27-95.

Johnson et al., teach a method of treating an individual to regulate actin polymerization, stress fiber formation and/or focal adhesion assembly by administration

of a compound such as Botulinum C3 exoenzyme also known as ADP-ribosyl C3 transferase at 100ng/ul, see in particular column 14, line 56-line 15, line 59, column 18, lines 30-63 and Example 3, including administration directly to a cell in vivo, ex vivo or systemically, see in particular column 18, line 44. Additionally administration is as in column 15-16 including subcutaneous, intramuscular or transdermal. The administration may be measured functionally including detecting neuronal response and for a therapeutic composition for the treatment of Parkinson's or Alzheimer's disease, see in particular Abstract and column 17, lines 18-58 and claim 40. As the administration routes are systemic the administration necessarily results in the administration at sites of lesion including to neurons within the PNS and CNS. It is further noted that the method is effective to treat Alzheimer's and Parkinson's disease which are recognized as affecting CNS brains neuronal cells which exhibit focal lesions. Thus, the reference teachings anticipate the claimed invention absent evidence to the contrary because the property of suppressing said inhibition of neuronal axon outgrowth is inherently provided.

Applicants argue essentially as set forth above, that the reference fails to teach a method of suppressing the inhibition of neuronal axon growth by delivering C3 directly at a CNS or PNS lesion site in a patient. Applicants argue that the reference does not specifically teach localized delivery to a CNS or PNS lesion or suppressing the inhibition of neuronal axon growth. Applicants thus argue that the reference cannot be anticipatory.

Applicant's arguments filed 3-3-03 have been fully considered but are not persuasive. Applicant's arguments appear to contend that because the reference does not ipsis verbis recite the claim limitations that the reference cannot be anticipatory. However, applicants are directed to MPEP 2112. Something which is old does not

become patentable upon the discovery of a new property. The claiming of a new use, new function or unknown property which is inherently present n the prior art does not necessarily make the claim patentable. In re Best, 562 F.2d 1252, 1254, 195 USPQ 430, 433 (CCPA 1977). The Johnson reference teaches administration of the same compound to a patient suffering most notably from Alzheimer's or Parkinson's disease, amongst others, for the effective prevention and/or treatment of the disease. Such diseases exhibit neuronal degeneration and suitable treatment would provide for neuronal regeneration and axon outgrowth. As the treatment is effective, it is deemed to provide for axon outgrowth. The administration allows for delivery of the drug to the CNS and PNS which are known sites of lesion. As the administration is the same it necessarily and inherently allows for delivery of the drug to the CNS and PNS which are known sites of lesion. Thus, the Examiner has set forth a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." Once the examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product. In re Marosi, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir. 1983). Without such evidence the Examiner cannot withdraw the rejection of record. Applicants have set forth no evidence to show unobvious difference. As the administration is deemed the same the reference is anticipatory. The claims provide no limitations as to suitable dosages or routes of administration that are different from the prior art.

Status of Claims

9. No claims are allowed.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry of a general nature or relating to the status of this general application should be directed to the Group receptionist whose telephone number is (703) 308-0196.

Papers relating to this application may be submitted to Technology Center 1600, Group 1640 by facsimile transmission. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). Should applicant wish to FAX a response, the current FAX number for Group 1600 is (703) 308-4242.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sharon L. Turner, Ph.D. whose telephone number is (703) 308-0056. The examiner can normally be reached on Monday-Friday from 8:00

AM to 4:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Kunz, can be reached at (703) 308-4623.

Sharon L. Turner, Ph.D.
June 11, 2003

GARY KUNZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600